

REMARKS/ARGUMENTSRequest for Information

1. The Examiner required applicant and the assignee of this application to provide the following information under 37 CFR 1.105 that the Examiner has determined is reasonably necessary to examination.
2. The information is required to identify products and services embodying the disclosed subject matter of Sacksaver (as seen in <http://www.sack-saver.com>) and identify the properties of similar products and services found in the prior art. The applicant's website with the products and services embodying the disclosed subject matter seemed to be available as early as October 13, 2002. The examiner enclosed a snapshot of the website with drawing that is very similar to the drawing submitted by the applicant as part of the original disclosure. The examiner also noted the applicant website seems to allow members of the public to obtain a demo version and/or use the game sack saver game. As such, the examiner would like to compare the sack-saver demo and available game that is associated with applicant's website marked on October 13, 2002 until March 31 2003.
3. In response to this requirement, the Examiner requested copies of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter - the teaching of bagging a grocery bag or related activities.
4. Where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.
5. The Examiner stated that the fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement.
6. The Examiner reminded the assignee and applicant that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. However, where the applicant does not

have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

7. The Examiner stated that a complete reply to this Office action must include a complete reply to the above requirement for information. The time period for reply to the above requirement coincides with the time period for reply to the Office Action.

The response to this requirement is contained in the attached Affidavit, which shows that the Sack Saver demo was not available to the public during the period October 13, 2002 to March 31 2003.

Claim Rejections -35 USC § 112

9. The Examiner rejected claims 1, 5-11 and 34-35 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated: "The term 'a special characteristic' in claim 1, 5-11 and 34-35 is a relative term which renders the claims indefinite. The term 'a special characteristic' is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

First, Applicant previously pointed out that the term "special characteristic" can only be found in claim 34. Applicants respectfully request the Examiner to rescind this rejection as it pertains to claims 1, 5-11 and 35. Second page 12, lines 6-8 states:

"For example, some items are crushable and/or fragile and those are recorded as special characteristics. Other special characteristics include a tendency to absorb odors and a tendency to emit odors."

Applicant submits that this statement provides a definition for the term "special characteristic" sufficient for one of ordinary skill in the art to be reasonably apprised of

the scope of the invention.Claim Rejections -35 USC § 103

4. The Examiner rejected claim 1, 5, 8-9, 11 and 34 under 35 U.S.C. 103(a) as being unpatentable over Eckenwiller US 2003/0163292 in view of Sack Saver and further in view of Yamamoto US 5, 265,888.

The Examiner stated: "Claim 1: The Eckenwiller reference provides a teaching of a method to train a user to pack a retail carrier bag comprising of: providing logic in a computer to evaluate whether a plurality of virtual retail carrier bags having been properly packed with a plurality of virtual purchased item (see paragraph 57 and FIG 17 'efficiency') said logic include packing criteria each virtual item having a specification including weight and dimension (see paragraph 24-25), representing plurality of virtual purchased item (see FIG 5) moving said plurality of virtual purchased item one at time within said computer in accordance with signals generated by said user (see FIG 3-5); evaluating in said computer how closely the packing of said plurality of virtual purchased item into said plurality of container conforms to said packing criteria (see paragraph 57 and FIG 17) and providing feedback to the user (see FIG 17 'efficiency').

The Eckenwiler reference do not provide a teaching displaying a retail carrier bag, presenting a virtual retail carrier bag and moving virtual item into a plurality of carrier bag and the Eckenwiller reference do not explicitly teaches that the items are presented in a random order.

The Eckenwiller reference do not provide a teaching of different simulated grocery item, instead the Eckenwiller reference provides a teaching where part. The examiner takes the position that main difference between the Eckenwiller reference and claimed invention in this particular case is the visual graphics that user sees. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to change the display graphics to display either things that can be interpreted as part or groceries, because Applicant has not disclosed that displaying specific graphic provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected both graphics, to perform equally well with either the graphic display because both

picture the same function of visualizing the item to be packed with the container. Therefore, it would have been *prima facie* obvious to modify Eckenwiller to obtain the invention as specified in claim 1 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Eckenwiller.

The Yamamoto reference provides a teaching of presenting item in computer in a random order (see Abstract). Therefore, to provide a software that presented item in random order would have been obvious to one of ordinary skilled in the art, in view the teaching of Yamamoto, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (re-programming) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the random presentation used in Yamamoto would the item presentation of Eckenwiller to provide a solution from different item input presentation order.

The Sack Saver reference provides a teaching of displaying a retail carrier bag, presenting a virtual carrier bag (see Sack Saver reference FIG item 3). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of a retail carrier bag, in order to provide a simulation of different retail environment.

Claim 5: The Eckenwiller reference provides a teaching of having a packing criteria that includes the number of item packed in each container (see paragraph 25 and 57).

Claim 8: The Eckenwiller reference provides a teaching of feedback that includes the weight distribution among said plurality in each container (see FIG 17 'weight').

Claim 9: The Eckenwiller reference provides a teaching of a feed that include the number of virtual purchased item in each container (see FIG 17 '#Parts').

Claim 11 and 35: The Eckenwiller reference provides a teaching of a step of recording said feedback in a database accessible to an administrator through a computer network (see paragraph 38)."

The Applicant again respectfully traverses this rejection. The Eckenwiler reference is “a simulation program that determines a packaging configuration for placement of any math-based part/assembly into a selected shipping container for transfer of the math-based part/assembly to customer plants. The simulation program determines either automatically or manually an efficient packaging configuration for placement of any part/assembly into any appropriate shipping container.” See abstract. The operation of the Eckenwiler invention is detailed below. Please refer to the Figures in the Eckenwiler reference while reading this.

FIG. 1, illustrates the Eckenwiler method generally. In exemplary embodiment of this invention, an executable simulation program 10 is run from a computer workstation 12. In response to a request for an input of the item to be used in the simulation, the program runs in either a manual, automatic or retrieval mode.

The item inputted is a computer aided design (CAD) model representation 14 of the physical part/assembly to be shipped. This computer model is selected from a product database 16. For example, model 14 can be a CAD representation of an automotive part such as a window regulator motor.

The simulation arranges model 14 (primary) with a duplicate model (secondary) in a variety of configurations for both the primary and the secondary. Here, these two configured parts serve as the unit of measure for the development of part/container layouts. These unit patterns are oriented into six unique pattern orientations, which are considered for each packaging container. These six orientations relate to movement of the configured patterns about the x, y and z axis. Each of these pattern orientations is considered for each packaging container available from a container database 18. Accordingly, program 10 analyzes many arrangements of the model and numerous configurations for comparison to multiple containers in order to provide the most efficient configuration.

Upon completion of the simulation the most efficient packaging configuration is determined with reference to the container size, the number of parts incorporated into the container, the overall weight of the container and efficiency of the pack configuration.

FIG. 2. illustrates the operation of program schematically. The program user executes step 20 to open the file for a CAD model 14 from the product database 16. The program user selects the packaging simulation program 21 from a database 16.

The simulation program prompts the user to select the packaging mode option to be used by the program, either step 22, 23 or 24. In this embodiment there are three options; step 22 is the option for the automatic mode (FIG. 2A), step 23 is the option for the manual mode (FIG. 2B), and step 24 is the option for the retrieval mode (FIG. 2C).

A saved pack layout is opened from a database 16 with the selection of the retrieval mode 24. And the packaging simulation program 21 advances to step 31, where the program user can interact with the saved data through display and printout options.

The simulation program will run faster with a simplified CAD part model, (i.e., a simplified CAD model representation of the original CAD model), than say that of the actual CAD part model that is available from the product database. Therefore, pack layouts can be created (and saved) using the simplified CAD part model. And these pack-layouts are then retrieved after the original CAD part model has been opened, with the intent of "fine-tuning" the two-part pattern. This allows for improved pack-layout efficiencies when using the Manual mode of the simulation program.

If either the manual or automatic mode is selected, the simulation program advances to step 26. The program user is then prompted to enter packaging parameters, which include but are not limited to the following items; part weight, part ship rate, part to part clearance, part to container clearance, and part orientation options (or limitations).

Once the packaging parameters are inputted at step 26, the simulation program advances to step 28 and the program user is prompted to select a customer container database that includes the listing of available containers for multiple customers. Each customer container database in 28 has the listing of available containers and the selection criteria (if applicable) for choosing the appropriate container. With selecting the CUSTOM option in step 28, the program user can create a new container database in step 29. The CUSTOM option 29 includes: creating a unique list of containers by selecting any number of customer databases and/or by individually defining container sizes; saving and retrieving the newly created container list; and display options for listing and clearing the container list.

If the manual mode is selected in step 23 (FIG. 2), then step 32 provides the program user with a plurality of part/container pack design options. These options include but are not limited to the following; adjustment of the pattern, adjustment of the repeat distance, lists packs, display packs, displays of the work pattern, available options, parameters, information and of course an exit prompt. All of these options in step 32 are interactive and can be continuously selected until the exit option is selected. Additionally, the options of steps 32 are presented to the program user in the recommended order of usage. Although these options are in the order of recommended usage the order of their usage may vary.

In FIGS. 3-7, portions of the simulation run by the automatic mode, which can be selected in step 22, are illustrated. FIGS. 3-7 illustrate just one example of a simulation run with a particular model 38. Referring in particular to FIG. 3, the development of a two-part pattern about the xy plane is illustrated. Here, a primary part 38 is fixed at the origin of a principal plane 40. Primary part 38 corresponds to the CAD model selected in step 20 of FIG. 2. In this Figure principal plane 40 is configured about the xy axis. During execution of the simulation program, primary part 38 is compared with a plurality of secondary part locations 42; and are arranged in an array about primary part 38 in principal plane 40

(FIG. 3).

For purposes of illustration, twelve positions of secondary part 42 are arranged in an array about primary part 38. It is, of course, contemplated that more or less locations of the secondary part 42 may be arranged in an array about primary part 38. However, for purposes of this illustration twelve positions are used.

In addition, four unique orientations of the primary part are also investigated with each of the secondary part locations. Three primary part orientations are illustrated by bracket 44. The fourth configuration being the primary part 38 orientation that is currently being investigated by the simulation program and is illustrated at the origin of principal plane 40.

Accordingly, FIG. 3 illustrates that 48 two-part pattern configurations in the xy plane are available for comparison by the simulation program.

Referring now to FIG. 4, the analysis of a two-part pattern for the same CAD model selected in step 20 is illustrated about the xz plane. Here, a primary part 38 is fixed at the origin of a principal plane 46. In this Figure principal plane 46 is configured about the xz axis. Similar to the comparison of FIG. 3, and during execution of the simulation program, primary part 38 is compared with a plurality of secondary parts 42 which are arranged in an array about principal plane 40 (FIG. 3).

In addition, four unique orientations of the primary part are also investigated with each of the secondary part locations. Three primary part orientations are illustrated by bracket 44. The fourth configuration being the primary part 38 orientation that is currently being investigated by the simulation program and is illustrated at the origin of principal plane 46. Accordingly, FIG. 4 illustrates that 48 two-part pattern configurations in the xz plane are available for comparison by the simulation program.

Referring now to FIG. 5, the analysis of a two-part pattern for the same CAD model selected in step 20 is illustrated about the yz plane. Here, a primary part 38 is fixed at the origin of a principal plane 50. In this Figure principal plane 50 is configured about the yz axis. During execution of the simulation program primary part 38 is compared with a plurality of the secondary parts 42 which are arranged in an array about principal plane 50 (FIG. 5).

In addition, four unique orientations of the primary part are also investigated with each of the secondary part locations. Three primary part orientations are illustrated by bracket 44. The fourth configuration being the primary part 38 orientation that is currently being investigated by the simulation program and is illustrated at the origin of principal plane 50. Accordingly, FIG. 5 illustrates that 48 two-part pattern configurations in the yz plane are available for comparison by the simulation program.

FIG. 6 illustrates several (54, 56, 58, 60, 62, 64 and 66) of many two-part pattern configurations between primary part 38 and secondary part 42 which are utilized by the packaging optimization simulation system. For purposes of illustration, and referring now to FIGS. 3 and 6, the two-part configurations illustrated in FIG. 6 represent the configurations of primary part 38 when it has the initial configuration illustrated as 68 in FIG. 3 and it is being configured with secondary part 42 having the configuration illustrated by (70-84) in FIG. 3. The configuration of secondary part 42 with respect to primary part 38, namely configurations (70, 72, 74, 76, 78, 80, and 82) corresponds to the configurations illustrated in FIG. 6 by items (54 and 70), (56 and 72), (58 and 74), (60 and 76), (62 and 78), (64 and 80) and (66 and 82), respectively.

Accordingly, one hundred and twenty, two-part patterns are determined from FIGS. 3-5. This number is based upon a twelve point array of secondary part 42, which as previously mentioned may be modified to include more or less positions, and the factoring out of

redundant patterns which may be determined (twenty four in all) from the simulation run in FIGS. 3-5. Of course, and if the number of positions in the array varies this number will also vary.

Referring now to FIG. 7, each two-part pattern orientation is considered in six orientations 84, 86, 88, 90, 92 and 94; corresponding to orientations of the two-part patterns about the x, y and z axis. And the coordinate system (x, y and z) is understood to be fixed to one of the inside corners of the packaging container during simulation. Accordingly, each orientation is considered for each packaging container available from the database.

Accordingly, the simulation calculates seven hundred and twenty possible configurations (or part layouts) of the developed two-part patterns. Here, a part layout can be understood to be the unbounded three dimensional array of a two-part pattern. These seven hundred twenty part layouts or configurations are then compared to each of the containers selected from the database in order to generate the part/container layouts. If any of the calculated part/container layouts do not meet the customers' packaging requirements, then these layouts are not considered as a valid (or potential) packaging design and (by default) will not be displayed to the program user as such. All of the valid part/container layouts are organized in a list and presented to the program user as an on-screen display printout (illustrated as box 19, FIG. 1).

Box 30 (FIG. 2) summarizes the execution of the simulation program in the automatic mode. Item (A) in box 30 summarizes the run of the simulation program that develops the one hundred and twenty possible configurations of the two-part pattern described in FIGS. 3-6. Item (B) in box 30 summarizes the run of the simulation program that executes the calculations used to develop the part layouts described in FIGS. 7. Item (C) in box 30 summarizes the run of the simulation program that develops the part/container layouts.

In FIGS. 8-10, portions of the manual mode of program 10 are illustrated. The manual

mode is selectable from box 23 (FIG. 2). During manual mode the user obtains the CAD part model from the database and is illustrated in box 100 as the primary part. The simulation program prompts the user to develop the pattern by selecting the pattern direction from the options available in the box 102. In an exemplary embodiment, the default pattern direction in box 102 coincides with the smallest dimension of the primary part. Of course, and as an alternative the default direction may vary. In addition, the user may select any pattern direction available in box 102.

Once the pattern direction is selected, the simulation program creates a copy (secondary part) of the primary part and is located in the pattern direction as chosen in box 102. This is illustrated in box 104.

After the pattern direction is selected, the simulation prompts the user with a menu of options, illustrated in box 32 (FIG. 2). The first option listed (recommended) is to adjust the part-pattern and is illustrated in box 106. Adjustment of the part-pattern consists of configuring the secondary part relative to the primary part which is fixed in position. The part-pattern adjustment options illustrated in box 106 consists of the following; 3D translation of the secondary part in the six axial directions, translation distance value setting (illustrated in FIG. 107), re-orienting the secondary part 180 degrees about an axis, change of the pattern direction, and nesting options. For example, box 108 illustrates the 180 degrees flipping of the secondary part along the z-axis.

After accepting the position of the secondary part, selecting the Nest option in box 106 (FIG. 8) allows the program user to select the dimensional control for nesting. This is illustrated in box 110 (FIG. 9). For example, box 110 provides the user with nesting options in either one dimension (along the XC, YC or ZC axis), or two dimensional (in the XY, YZ, or XZ plane), or three-dimensional indicated as full (box 112).

In FIGS. 10-15, the nesting process method is illustrated two dimensionally for simplicity

and understanding. During this process an initial clearance gap (between the primary and secondary part) is provided from the user input for the desired part-to-part clearance (FIG. 2, Box 26); and stored as a calibration constant. The primary part is fixed in location at an origin location and then the secondary part is positioned at any non-intersecting location. The minimum distance between the primary part and the secondary is measured and stored in memory as the clearance vector. In addition, the dimensions (x, y, and z) of a boundary box 114 around both parts is measured and recorded.

During operation of the nesting process the minimum distance is measured between parts and is compared to the user defined clearance gap. If the minimum distance is greater than the desired part-to-part clearance, then the secondary part is translated along a clearance vector toward the primary part and to the location where the minimum distance between parts is now equal to the clearance gap (FIG. 11, Box 116). And if the dimensions of this new boundary box 116 decreases, the secondary part is translated incrementally and perpendicularly to the clearance vector until the minimum distance between the parts is reached which will provide the smallest possible dimensions of the boundary box 118 (FIG. 14).

For example, and referring now to FIG. 15 portions of a control algorithm 120 for performing the nesting process method is illustrated. The steps of the control algorithm 120 are also illustrated sequentially in FIGS. 10-14.

Box 122 represents the request for a clearance gap input for the two parts. Box 124 represents the positioning of the primary part at an origin point. Box 126 represents the manual positioning of the secondary part at any non-intersecting location. Box 128 represents the logic for measuring the minimum distance between the parts and the assignment of a value to a variable defined as the clearance vector.

Box 130 represents the measurement of the dimensions of the boundary box defining or

enclosing both the secondary and primary parts. This value is stored in memory.

A decision node 132 determines whether the minimum distance is equal to the clearance gap. If not, a decision node 134 determines whether the minimum distance is greater than the clearance gap. If not, then the minimum distance is less than the clearance gap. And with box 136, the secondary part is translated along the clearance vector to the location where the length of the clearance vector is equal to that of the clearance gap. Here, the secondary part moves away from the primary part and in the direction of the clearance vector. And the logic of box 128 is repeated.

If however, the minimum distance measured is greater than the clearance gap, box 138 instructs the secondary part to be moved along the clearance vector in the direction toward the primary part to the location where the length of the clearance vector is equal to that of the clearance gap.

After this process is performed box 140 represents the remeasurement of the boundary box around both parts and the new value is assigned to a new boundary box measurement stored in memory.

Alternatively, and if the minimum distance is equal to the clearance gap, box 142 represents the instruction to translate the secondary part along a line perpendicular to the clearance vector. After this process is performed box 140 represents the remeasurement of the boundary box defined around both parts and this value is assigned to new boundary box measurement stored in memory.

After the commands of box 140 are executed, a decision node 144 determines whether any of the edge dimensions (x, y or z) of the boundary box decreased over the previously recorded dimensions, (i.e., comparison of new measurement vs. previous measurement).

If there was no measured decrease in any of the dimensions of the boundary box, box 146 instructs the secondary part to be translated back to its previous position. Then box 148 stores that positional information of the two-part pattern to be used.

Alternatively, and if any of the dimensions of the boundary box decreased, the logic of box 128 is repeated. This process will continue until the minimum boundary box dimensions are obtained.

In FIG. 16, the option for adjusting the repeat distance of the two-part pattern is illustrated. Here a command prompt 150 provides a user with selections for allowing independent control (x, y and z directions) of the clearance between the two-part patterns. This is particularly useful for interpreting the thickness of dunnage required for packaging the considered part. Command prompt 150 allows the user to manually set the value for the (two-part) pattern repeat distance by translating the repeated (second) two-part pattern either away or closer to the initial two-part pattern. The magnitude for translating the two-part pattern can be set by the user with the "Move Distance" option. One dimensional nesting (in the direction of 'Set Axis' of the two two-part patterns is available with the "Auto" option.

In FIG. 17, the options for the listing pack command of box 32 (FIG. 2) is illustrated as dialog box or prompt 152. And each option in box 152 has its own menu of options, (i.e., prompts 154, 156, 158, 160 and 162). Box 164 represents the information obtained after the containerization optimization method has been performed. It is noted that here this option is available for all packaging modes, (e.g., automatic, retrieve and manual). Box 164 provides the user with necessary information in order to select the most efficient packaging container. For example, outlined in box 164 a line of text reveals that twelve parts with an overall (packed container) weight of 28.9 pounds and overall efficiency of 0.3475 is obtained from pack No. 66. Prompt 158 allows the user the option to list results by container style, (e.g., Totes, Bulk Packs, All Styles, Single Container and Auto). The

“Auto” container style is the default setting which selects the container style based on the customer's requirements; that is, if a customer database was selected in Box 28 (FIG. 2).

Prompt 160 allows the user to input the maximum weight limit for the container to be used. Prompt 162 allows the user to input a shift limit, (i.e., maximum amount of containers to be shipped during an eight hour work period). Both prompts 160 and 162 have an on/off toggle feature that allows the weight and shift limit control feature to be either considered or ignored by the simulation program. Prompt 154 allows either all the pack results to be listed or to consider only the most efficient results for each unique container size. All of these features allow the user to modify the output for display purposes. Prompt 156 provides data sorting options that allows the user to sort the column data in Box 164, (e.g., container volume, total number of parts per container, containers per shift, efficiency, etc.).

In FIG. 18, the display pack option of box 32 (FIG. 2) is illustrated by dialog boxes and or command prompts 166, 168 170, 172 and 174. Prompts 166 and 168 provide the user with the selections settings and the options for allowing the program user to display the individual pack designs with three different pack-layout options; namely, between parts, around outside edge and don't distribute identified as information boxes 170, 172 and 174, respectively. It is noted that this option is available for all packaging modes selected, (e.g., automatic, retrieve and manual).

In FIG. 19, the display work pattern option of box 32 (FIG. 2) is illustrated by box 176. This action allows the part pattern to be displayed. This is useful for editing the two-part pattern. The pack options in box 32 are illustrated by box 177. This action allows the pack-layout design to be saved (for use in retrieval mode), cleared, retrieved and/or calculated. The 'Calculate' option is useful if changes are made to the original two-part pattern, when using the 'Display Work Pattern' option (box 176).

In FIG. 20, the 'Parameters' display and information option of box 32 (FIG. 2) are

illustrated by dialog box 178 and box 180. The parameter option allows the packaging and manufacturing parameters to be edited by the user. The information option displays positioning information regarding the considered two-part pattern. See Eckenwiller paras [0016] to [0062].

Claim 1 of the Eckenwiller reference states:

“A method for determining a packaging configuration for use in a shipping process, comprising: selecting a first component for use in a simulation program; locating said first component at an origin location in a first plane; arranging a second component in a spatial relationship with said first component, said second component being identical to said first component and being located in said first plane; relocating said second component with respect to said first component; and determining an optimal configuration between said first and second component.”

This confirms that Eckenwiller is applied to multiples of the same part.

The Figures of Eckenwiller present input screens and simulations of multiples of a single part packed into containers. The user only determines the optimum packaging for one part at a time. The Eckenwiller invention does not present one part after another to the user. Further, there is no graphic simulation of a grocery checkout counter in Eckenwiller. If Eckenwiller were applied packaging of grocery items it would result in display graphics of packing multiples of the same item in a case of product to be shipped from a factory to a supermarket. The display graphics of the instant invention display packaging of many different items in a grocery bag. One of ordinary skill in the art would never have expected the graphics of Eckenwiller and the instant application to perform in the same way at all because they both visualizing items to be packed within containers in entirely different ways. Thus it could not have been an obvious matter of design choice to a person of ordinary skill in the art to change the display graphics of Eckenwiller to display a grocery item. And it could not have been prima facie obvious to modify Eckenwiller to obtain the invention as specified in claim. Eckenwiller and the instant application are indeed

patentably distinct.

The Eckenwiller reference is a complicated simulation program to enable a user to determine the optimum way of packaging multiples of the same part in a designated container. It is useful in the manufacturing and shipping industries. It is not a game. It provides no training. It is not applicable in retail sales. It has nothing to do with packaging of items purchased in a grocery store in retail bags.

Thus the Eckenwiller reference cannot possibly provide a teaching of a method to train a user to pack a retail carrier bag comprising: providing logic in a computer to evaluate whether a plurality of virtual retail carrier bags having been properly packed with a plurality of virtual purchased items said logic includes packing criteria each virtual item having a specification including weight and dimension, representing a plurality of virtual purchased items moving said plurality of virtual purchased item one at time within said computer in accordance with signals generated by said user; evaluating in said computer how closely the packing of said plurality of virtual purchased items into said plurality of container conforms to said packing criteria and providing feedback to the user.

The Yamamoto reference is a computer game. The game virtually presents a number of objects moving vertically down a computer screen which become erased when aligned with other objects which can be moved under the control of the player.

Yamamoto says nothing about presenting any objects serially and there would simply be no advantage to presenting the parts described by Eckenwiler serially. Further, the technology of Eckenwiller is so far removed from the technology of the instant invention that a combination of Eckenwiller with Sack Saver and/or Yamamoto is inapposite. Thus it could not be obvious to present the parts of Eckenwiler serially as neither Eckenwiller or Yamamoto supports this.

5. The Examiner rejected claims 6-7 under 35 U.S.C. 103(a) as being unpatentable over Eckenwiller US 2003/0163292 in view of Sack Saver, in view of Yamamoto US 5, 265,888 and

further in view of Chowdury US 6,876,958.

The Examiner stated: "Claim 6-7: Eckenwiler does not provide a teaching where the quantifying comprises of determining that a crushable one of the items in one of the organized state is in a lower position within the carrier (Claim 6, 17 and 28) or determining the breakable one of the item in one organized state is in a lower corner position within the carrier (Claim 7, 18 and 29). However, Chowdury provides a teaching where the quantifying is determined by the determining the fragile item be placed in a certain position in the container (see Chowdury col. 9: 14-31). Therefore, it would have been obvious for one of ordinary skilled in the art to include the feature of quantifying by the determining the fragile item be placed in a certain position in the container, as taught by Chowdury, because it would help the user be able to take into account possible damage (see Chowdury see 9: 15-20)."

Applicants respectfully traverse these rejections. Obviousness in view of it Eckenwiler, Yamamoto and Sack Saver has been traversed above. Since claims 6-7 depend from claim 5, Claims 6-7 are also allowable. The Applicants wish to point out that Chowdury invention includes methods of selecting cases in which to pack items in an item order and selecting the sequence and configuration of placement of items into the selected cases. One such method includes examining an order comprising a list of items to be packed, determining the cases available for packing, determining the minimum number of cases required for packing the items in the list of items to be packed, selecting a case to be packed with one or more of the items in the list of items to be packed, wherein said selecting a case comprises determining a desired average volume per case and selecting the smallest of the cases available to be packed that comprises a volume in excess of the average volume per case, and determining the configuration of placement in the case to be packed of items in the list of items to be packed. Such steps may be repeated until all items in the item list are selected and configured for packing.

This is an entirely different invention from the instant application. Moreover, it does not determine where fragile and breakable items should be placed. The section cited by the Examiner simply talks about a layer limitation which is predetermined according to client

and customer preferences.

The instant invention involves no item list or selection of cases or determining the sequence and configuration of placement of items into the selected cases. The instant invention only uses grocery bags and does not determine the sequence in which items are placed in the bags. In the instant invention the trainee determines the sequence in which items are placed in the bags. The present invention does not instruct the trainee where to pack individual items: it only determines whether the trainee has placed a crushable item in the proper place in the bag. There would be no advantage to combining the layer limitation feature of Chowdury with Eckenwiler, Yamamoto and Sack Saver.

6. The Examiner rejected claims 10 and 34 under 35 U.S.C. 103(a) as being unpatentable over Eckenwiler US 2003/0163292 in view of Sack Saver, in view of Yamamoto US 5, 265,888 and further in view of Armington US 2001/0017023.

The Examiner stated: "Claim 10: The Eckenwiler reference provides a teaching of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags. However, the Armington reference provides a teaching of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags (see paragraph 75). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags, as taught by Armington, since it would allow the trainer to measure the efficiency of the student.

Claim 34: The Eckenwiler reference provides a teaching of a GUI of a bag item and bag weight indicator (see FIG. 17), providing a computer linked means for a said person to manipulate said cursor (see FIG 1 item 12), providing specification for each different item, including weight and dimension (see paragraph 24-25), tracking a number of parameter for each training run including total weight of item and placed in each bag and whether each item were properly placed in said bag (see FIG 17 item 'weight', '#parts', 'Efficiency'), reporting these parameter to said person (see paragraph 38) and calculating a score for each run (see FIG 17 'efficiency').

The Eckenwiller reference fails to provide a teaching of providing a computer generated GUI of a packing station; a simulation of plurality of different purchased item; a simulation of at least one packing bag; a simulation of at least one packing platform; a simulation of a conveyor belt traveling toward said packing station; an item vertical and horizontal rotate button; a new bag button; simulation of a grocery cart; allowing said person to rotate said purchased item, if necessary by clicking one or both of said rotate button with cursor; allowing said person to place at least one bag on said packing station by clicking on new bag button. The Sack Saver reference provides a teaching of a method of training of a person in the art of packaging purchased item comprising the step of: providing a computer generated GUI of a packing station (see Sack Saver item 6); a simulation of plurality of different purchased item (see Sack Saver item 1); a simulation of at least one packing bag (see Sack Saver item 3); a simulation of at least one packing platform (see Sack Saver item 6); a simulation of a conveyor belt traveling toward said packing station (see Sack Saver item 1); an item vertical and horizontal rotate button (see Sack Saver item 4); a new bag button (see Sack Saver item 2); simulation of a grocery cart (see Sack Saver item 6); allowing said person to rotate said purchased item, if necessary by clicking one or both of said rotate button with cursor (see Sack Saver item 4); allowing said person to place at least one bag on said packing station by clicking on new bag button (see Sack Saver item 2). Therefore, it would have been obvious to one of ordinary skilled in the feature of providing a computer generated GUI of a packing station; a simulation of plurality of different purchased item; a simulation of at least one packing bag; a simulation of at least one packing platform; a simulation of a conveyor belt traveling toward said packing station; an item vertical and horizontal rotate button; a new bag button; simulation of a grocery cart; allowing said person to rotate said purchased item, if necessary by clicking one or both of said rotate button with cursor; allowing said person to place at least one bag on said packing station by clicking on new bag button; as taught by Sack Saver, The Eckenwiller reference provides a teaching of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags. However, the Armington reference provides a teaching of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags (see paragraph 75). Therefore, it would have been obvious to one of ordinary

skilled in the art to include the feature of feedback that includes the total time taken by said user to pack all said purchased item into said plurality of virtual retail bags, as taught by Armington, since it would allow the trainer to measure the efficiency of the student.

The examiner takes OFFICIAL NOTICE on the feature of done button, allowing said person that has finished packing all purchased item by clicking the done button, providing linking mean for said person to manipulate said cursor (input device) and cursor as being old and well known in the art of graphical user interface. Therefore it would have been obvious to one of ordinary skilled in the art to include the feature of done button and cursor because it would enable the user to provide game input information to the system.”

Applicants respectfully traverse these rejections. Obviousness in view of Eckenwiler, Yamamoto and Sack Saver has been traversed above. Since claim 10 depends from claim 5, claim 10 and claim 34 are now allowable. In addition Applicants wish to point out that Armington describes a packaging system which includes a cushioning conversion machine for converting stock material into relatively low density cushioning material or dunnage and a packaging system controller. The packaging system controller provides packaging instructions related to a part or parts to be packaged and instructs the cushioning conversion machine to produce the cushioning material. In one aspect of the present invention the packaging system controller provides packaging instructions by retrieving a predetermined set of packaging instructions associated with a particular part. In another aspect of the Armington invention the packaging system controller provides packaging instructions by determining an optimized packaging methodology using one or more characteristics of the part or parts to be packaged. The packaging system also provides for automated inventory control and productivity monitoring.

This is another entirely different invention from the instant application. The instant invention involves no dunnage or cushioning material and no packaging system controller. There would be no advantage to combining the tracking system of Armington with Eckenwiler, Yamamoto and Sack Saver.

Response to Arguments

14. Applicant's amendments are sufficient to overcome the rejection under 35 U.S.C. §101; as such the rejection on claim 1,5-11 and 34-35 have been withdrawn.

15. With respect to applicant argument claims 1, 5-11 and 34-35 the applicant argue that the definition of the word "special characteristic" can be found in page 12 lines 5-8. However, the cited section only mentions that the special characteristic can be modified to be "any special characteristic". As such the examiner can not determine the metes and bound of the limitation of "special characteristic".

The applicant has pointed out above that the specification contains an adequate definition of "special characteristic."

16. With respect to applicant's argument that the Eckenwiller fails to provide a teaching of presenting different item and serially. The examiner respectfully disagrees. The Eckenwiller reference provides a teaching of different item (see FIG 1 item 16 and paragraph 37). With respect to item presented serially, the examiner interprets this limitation to mean that the item is presented one at a time. The Eckenwiller reference provides a teaching where the items are presented one at a time (see paragraph 27 item 42).

The applicant has pointed out in great detail above how Eckenwiller does not present different items serially.

17. With applicant's argument that grocery bags would be of little use or no use in the system described by Eckenwiller. The examiner respectfully disagrees. The Eckenwiller reference already set forth a teaching of a database with different packing container (see paragraph 18-19). The examiner takes the position modeling a grocery bag would only serve to add to the completeness of such database.

The Applicant has pointed out above that Eckenwiller could be used to determine how to pack multiples of grocery items in a container for shipment from a factory to a store. The

Applicant stands by his assertion that a grocery bag would be useless in this application. As can be well appreciated, grocery bags would not provide sufficient protection for the grocery items, could tear and would not permit efficient loading into a truck for shipment.

19. With respect to applicant's argument of the combination of Chowdury, Eckenwiller, Sack Saver and Yamamoto; the applicant argues that the comprises of determining that a crushable one of the items in one of the organized state is in a lower position within the carrier determining the breakable one of the item in one organized state is in a lower corner position within the carrier. The applicant argues that the Chowdury reference do not determine where the fragile and breakable item should be placed. The examiner respectfully disagrees. The section cited described a relative position of an item within a container. The examiner takes the position that such description is similar to the limitation of determining that a crushable one of the items in one of the organized state is in a lower position within the carrier determining the breakable one of the item in one organized state is in a lower corner position within the carrier.

The applicant does not understand the logic in this statement and has re-iterated his argument about Chowdury above.

20. With respect to applicant's argument that the combination of Armington, Eckenwiller, Sack Saver and Yamamoto is not valid since the Armington reference information that is not used in applicant's invention such as: dunnage or cushioning material. The examiner would like to note that the inclusions of such feature are not suggested by the examiner. Furthermore, claim 10 and 34 are listed under an open ended transitional phrase of comprising. The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps (see MPEP 2111.03).

The applicant wishes to add to his above listed arguments that the Armington invention is in the field of part shipment. See para. [0003]. An inventor in the field of training grocery store packers would be unlikely to look to the field of part shipment for a solution to his problem. Further Examiners are not permitted to mix and match pieces of different

document to manufacture rejections.

No additional fee is due on account of the above amendments. However an extension fee for response during the second month is due. This will be electronically paid on filing of this paper.

Reconsideration of this application and its early allowance are respectfully requested in view of the above presented amendments and remarks.

Respectfully submitted,

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